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RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS TO
BIOLOGICAL PROGRAMS(U) ADVANCED COMPUTER TECHNIQUES
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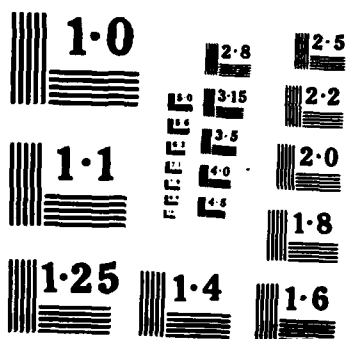
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REPORT NUMBER 12

RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS
TO BIOLOGICAL RECORDS

ANNUAL REPORT
1 September 1976 - 30 August 1977

ACT TECHNICAL STAFF

WILLIAM H. SMITH
Principal Investigator

March, 1978

Supported by

U.S. ARMY MEDICAL RESEARCH & DEVELOPMENT COMMAND
Fort Detrick, Frederick, Maryland 21701

CONTRACT NO. DADA17-68-C-8106

Advanced Computer Techniques Corporation
1501 Wilson Blvd., Arlington, Virginia 22209

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FORWORD

The present contractual effort is a continuation of a research project initiated in August of 1967.

This research is conducted under the overall cognizance of Col. Craig J. Canfield, M.D., Director of the Division of Medicinal Chemistry, and is conducted under the immediate direction of Lt. Col. David Davidson, head of the Department of Biology.



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I. INTRODUCTION

Walter Reed Army Institute of Research (WRAIR) had developed a complex network of computer programming systems for the storage, retrieval and association of chemical structures information and related data resulting from biology tests. These tests were (and are) performed at various medical schools and other laboratories and the results reported to WRAIR. Walter Reed is faced with accommodating it into a format that can be processed and evaluated at WRAIR.

Since August 1967, Advanced Computer Techniques Corporation has been providing consulting services to WRAIR staff in the implementation of computer based systems to quantify and generally assist the research efforts conducted by the Division of Medicinal Chemistry.

During the contractual period covered by this report the following efforts were enacted:

- A. Modifications to new CDC 3500 biology System;
- B. Modifications to old biology system programs;
- C. System and program documentation; and
- D. Production assistance provided as required.

II. OBJECTIVES

- A. Accommodates changes in laboratory procedures employed by researchers to the biology system.
- B. New tests systems implemented as new research is undertaken.
- C. Documentation of biology system.

III. ACCOMPLISHMENTS DURING THE YEAR

- A. Modifications to biology programs for accommodating files generated under DATA MANAGEMENT ROUTINES (DMR). Further modifications were done later to change DMR files to ELSA files.
- B. Modifications to the following programs for addition of a new test system in the new biology system:
 - 1) Pre-processor
 - 2) EDIT
 - 3) MATCH/MERGE on sample number
 - 4) MATCH/MERGE on accession number
 - 5) UPDATE
 - 6) Report

C. Modifications to the following old biology system programs:

1) RANE

EDIT
MERGE
PRINT

2) HANSON

EDIT
PRINT

3) SCHISTO

PRINT

D. Documentation changes to reflect new access methods and addition of new test system.

E. Production assistance was provided as required during the contract year.

F. Biology flag program was completed.

IV. CONCLUSIONS

At the end of the contract year, the new biology system was completed. The production running of the biology system was delayed due to problems in the chemistry system. Modifications to the new system for addition of new laboratory codes, new test system and change in method of access. Modifications to the old biology system for addition of new laboratory codes.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Synopsis of activities performed by Advanced Computer Techniques Corpora- tion in developing a new biology test system.		

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